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PROPOSALS FOR THE MANAGEMENT OF COMBAT STRESS REACTION IN THE AUSTRALIAN ARMY

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IT IS WIDELY ACKNOWLEDGED THAT MODERN WARFARE REFLECTS THE HIGH INTENSITY AND LONG DURATION OF COMBAT MADE POSSIBLE BY MODERN TECHNOLOGY. HIGH INTENSITY AND LONG DURATION OF COMBAT ARE TWO MAJOR CAUSES OF STRESS THAT CAN LEAD TO COMBAT STRESS REACTION AND, IN WORSE CASES, TO TRAUMA. THE RESULTING LOSS IN TRAINED MANPOWER REDUCES COMBAT EFFECTIVENESS.

THIS REPORT REVIEWS EVIDENCE ON THE INCIDENCE AND NATURE OF COMBAT STRESS REACTIONS. IT RECOMMENDS MEASURES WHICH SHOULD BE TAKEN IN THE AUSTRALIAN ARMY TO MINIMISE THEIR OCCURRENCE OR SEVERITY, AND TO TREAT STRESS CASUALTIES WITH A VIEW TO RETURNING AS MANY AS POSSIBLE TO ACTIVE SERVICE.

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PROPOSALS FOR THE MANAGEMENT OF COMBAT STRESS REACTION IN THE AUSTRALIAN ARMY

by

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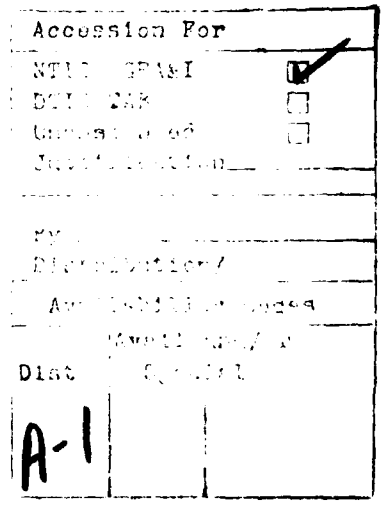
Abstract

It is widely acknowledged that modern warfare reflects the high intensity and long duration of combat made possible by modern technology. High intensity and long duration of combat are two major causes of stress that can lead to combat stress reaction and, in worse cases, to trauma. The resulting loss in trained manpower reduces combat effectiveness.

This report reviews evidence on the incidence and nature of combat stress reactions. It recommends measures which should be taken in the Australian Army to minimise their occurrence or severity, and to treat stress casualties with a view to returning as many as possible to active service.



It is widely acknowledged that the increasing destructiveness of modern weapons and the conditions and styles of modern warfare have heightened significantly the levels of stress faced by soldiers in combat (Gabriel, 1982, 1986; Manning, 1979; Mareth and Brooker, 1985). It is also widely acknowledged that exposure to combat stress may cause a number of behavioural and psychological reactions in soldiers which render them ineffective as members of combat units. (Schneider and Luscomb, 1984; Solomon and Mikulincer, 1987).

While experience from many wars (but particularly from World Wars I and II, Korea, Vietnam, and a number of wars in the Middle East involving Israel) has shown that battle stress casualties can constitute a significant proportion of all battlefield casualties, and that proper handling of them can result in their rapid reinstatement to active service, there is remarkably little attention paid either doctrinally or organisationally to this important problem.

This deficiency is apparent in the Australian Army, which has no specific doctrine on the prevention and management of combat stress reactions, no specific training designed to minimise the occurrence or severity of such reactions, no specific system for assessing and when necessary evacuating casualties of such reactions, and no dedicated system for the treatment of such casualties.

Aim

The aim of this paper is to review the evidence on the incidence and nature of combat stress reactions and to suggest measures which should be taken in the Australian Army to minimise their occurrence or severity and to treat stress casualties with a view to returning as many as possible to active service.

Development of the Concept of Combat Stress Reaction

The terms used to describe the reactions to combat stress and the casualties involved have been numerous and have often reflected a theoretical position on the causes of the reactions or an evaluative or judgemental statement on the fact of their occurrence.

Although psychological elements of a soldier's behaviour in combat had been alluded to in early military writings (such as those of the brilliant Chinese strategist Sun Tzu, some 500 years B.C.) it was only in the seventeenth century that military records began to record a condition termed nostalgia which clearly linked psychological debilitation with the conditions of combat (Rosen, 1975). The symptoms of nostalgia included a

"general sense of weakness and inability to concentrate and generally perform military tasks" (Jones, 1986, p. 181) and was referred to in the seventeenth century as the 'Swiss disease' because of its appearance in Swiss mercenary soldiers fighting far from home in a war in which they had little personal belief or commitment. In the Napoleonic Wars nostalgia was described as a significant cause of French military ineffectiveness at certain times and an approach to treatment was developed which bore many similarities to modern principles of managing combat stress casualties (Jones, 1985).

The diagnosis of nostalgia again appeared during the American Civil War, when combat stress reactions accounted for significant loss of manpower in both the Union and Confederate Armies. The Surgeon General of the Union Army reported 5,213 cases of nostalgia during the first year of the Civil War. This amounted to a rate of 2.34 cases per 1000 troops, a rate which rose to 3.3 cases per 1000 troops in the second year of the war. It is also of interest to note that over the period of the war approximately 6 per 1000 troops were discharged with a diagnosis of 'insanity' and a further 21 per 1000 were discharged with paralysis. It is likely that a significant proportion of the paralysis cases had no organic impairment and would now be recognized as showing hysterical symptoms (Kubala and Warnick, 1979).

In 1904-1905, during the Russo-Japanese War, the first war in which soldiers suffering psychological problems were treated by trained psychiatric professionals, "psychiatric casualties became so numerous that large numbers were turned over to the Red Cross for treatment and final disposition" (Kubala and Warnick, 1979, p. 2-1). A major category of stress reaction diagnosed among these casualties was termed neurasthenia, and was very close in symptomology to what was earlier called nostalgia.

It was in World War I, however, that the number of combat stress casualties became so large that it became a major source of combat ineffectiveness among the Allied forces. Since there had been little prior attention paid to the problem, its etiology was poorly understood. An early observation was that the incidence of casualties seemed to increase during periods of heavy artillery bombardment. The symptoms were generally simulated genuine neurological injuries such as paralysis, blindness, and surdomutism (Jones, 1986) and it was therefore assumed that the condition was organic in nature, arising from damage to the brain and nervous system caused by the intensity of nearby explosions. For this reason, symptoms of this nature were conveniently referred to as shell shock.

As the war progressed, however, mounting evidence forced a re-assessment of the view that the symptoms were caused by physiological disruption of the nervous system. Soldiers who had not been subject to intense bombardment developed symptoms of shell shock, while such symptoms were absent in wounded soldiers who had been subject to such severe concussion that their eardrums had been ruptured. German prisoners did not

develop shell shock when subjected to bombardment, whilst their Allied captors did. Autopsies of soldiers exhibiting the symptoms failed to reveal organic damage. Whole units developed similar symptoms when falsely believing that they had been subject to gas attacks. All of these findings made it quite clear that the symptoms were psychogenic in origin. One consequence of this changed understanding was the use of the term war neurosis to refer to the condition. Unfortunately, this was taken by both soldiers and doctors to imply profound underlying psychopathology and long-term disability, with the consequence that immediate treatment was not attempted and no real effort was made to return men to their units. Rather, the rule was one of evacuation to hospitals back in England. This policy meant soldiers were removed "far from their units at the front and where recovery would lead to loss of secondary gain and the suspicion of malingering or cowardice. Individual soldiers paid for these errors in treatment with chronic disability. The nation paid with the loss of critical manpower" (Mareth and Brooker, 1985, p. 186).

As some psychiatrists came to understand the impact that diagnostic labels could have on both patient and doctor expectations and beliefs, they began to use the tag N.Y.D. (Nervous) - standing for Not Yet Diagnosed (Nervous). This gave casualties no help "in formulating their disorder into something which was generally recognized as incapacitating and requiring hospital treatment, thus honorably releasing them from combat duty. This left the casualties open to the suggestion that they were only tired and a little nervous and with a short rest would be fit for duty" (Jones and Hales, 1987, p. 527).

The reaction subsequently underwent various terminological changes, especially during and after World War II and the Korean War. At first the symptoms were called exhaustion, then combat exhaustion. In World War II, the term exhaustion was chosen because it described the appearance of many of the psychiatric casualties and because it carried no connotations of basic personality defect. "Exhaustion was certainly understandable to any soldier who had been in combat, and therefore, the diagnosis did not carry the social stigma that any diagnosis beginning with the term (psycho) carried" (Kubala and Warnick, 1979, p. 2-2). During the Korean War, the term was expanded to combat exhaustion to differentiate the psychological from the physical effects of stress, and was later to be referred to as combat fatigue as it was thought that this better stated the expectation that this was a temporary and reversible condition. Other terms used during this period by US military forces included operational fatigue (U.S. Air Force), battle fatigue, and combat reaction. Casualties were generally referred to as psychiatric or neuropsychiatric casualties.

In the Vietnam War the U.S. Forces continued to employ terms carrying the expectations of recovery and the belief that the problems experienced by soldiers were a 'normal' reaction to the stress of battle. Although not used consistently, terms such as combat fatigue dominate American discussion of the period

(eg, Bloch, 1969; Bourne, 1970; Jones and Johnson, 1975). As others had realised earlier, however, there was some question concerning the appropriateness of the 'fatigue' label. Just as 'exhaustion' had indicated breakdown after a prolonged period of intense combat, so 'fatigue' carried similar, if not such extreme, connotations. However, it was observed that problem behaviours were exhibited by men after only relatively short and/or relatively light combat experience. It was hard to attribute these reactions in any sensible way to 'exhaustion' or 'fatigue'. The labels raised some problems for those exhibiting the symptoms, too, since they could feel that something 'deeper' was the problem because they were aware of the fact that they had not been subject to actual, intense and prolonged combat stress. Indeed, in the conditions of war prevalent in Vietnam, such a type of stress was unusual for almost all soldiers. Rather, the stress came in short bursts interspersed by periods of rest, boredom and the build-up of fear prior to going out on another patrol.

Some psychiatrists attempted to deal with these problems for themselves by devising differential diagnoses. Thus, Strange (1969) divided his combat-precipitated psychiatric casualties into three groups - combat fatigue, pseudocombat fatigue, and combat neurosis. In his analysis of Navy and Marine neuropsychiatric casualties hospitalised on the ship 'Repose', Strange classified only 15% as exhibiting combat fatigue. These men were characterised as having good premorbid adjustment, having suffered exposure to extreme stress coupled with other privation, responded rapidly and well to treatment, and generally returned to duty successfully. The majority of patients, however, were diagnosed by Strange as cases of pseudocombat fatigue. The clinical pictures presented by this group were superficially similar to those in the first group but the individuals had been in the combat zone for shorter periods of time and they had been subjected to less severe combat conditions. Strange believed they had a higher rate of past adverse histories and they were less successful in their response to treatment, with symptoms intensifying at the prospect of return to duty. The final group, diagnosed as combat neurosis cases, were men with long-standing neurotic problems that were aggravated by the stress of combat. They required longer hospitalisation than those in the pseudo combat fatigue group, but their prognosis was better and their return to duty rate approached that of the combat fatigue group.

In recent years the trend in the U.S. Army has been toward a more explicit acknowledgement of the 'normality' of adverse reactions to combat. Terms such as battle stress reaction are now commonly used (eg Schneider and Luscomb, 1984). Similar terms are used in other armies. The Israelis, for example, prefer the term combat reaction or combat stress reaction (Belenky, 1986; Solomon and Mikulincer, 1987). Jones and Hales (1987) propose that use of the label 'reaction' is not precise enough in terms of the expectancies it promotes and propose that using the term transient battle reaction would be preferable. This has the advantage of emphasizing that the

symptoms are a reaction to the stress of battle (and not the result of some underlying pathology) and that they are something which will pass relatively quickly - thus creating the expectancy of rapid return to duty. The British Army, whilst recognising the temporary nature of many reactions to combat, have not moved as far as these proposals in their terminology. In a 1981 speech (published the following year), the then Colonel Abraham still referred to battleshock, (Abraham, 1982), but in a recent interview he uses the term battle stress (Manners, 1988) (Brigadier Abraham is currently Director of Army Psychiatry).

The lessons to be learnt from the changing nature of terminology describing soldiers' behaviour under conditions of combat are important ones. We need to inform soldiers that some otherwise unusual reactions are 'normal' in response to combat stresses and encourage the realisation that they do not reflect underlying or enduring psychopathology, that they are amenable to treatment and are of short duration, and that their resolution will allow rapid return to active duty.

Bearing these points in mind, it is proposed that the Australian Army accept the general term combat stress reaction to refer to normal somatic and behavioural reactions to battlefield stress. Normal somatic reactions include muscular tension, shaking, increased perspiration, and reactions of the digestive, and urinary, respiratory and circulatory systems. Behavioural responses include fear and panic, sensitivity to noise, sleep difficulties, irritability and resentment, apathetic tendencies, and lethargic or euphoric post-combat mood states (Rath, 1980).

Reactions which go beyond these on a continuum of severity should be referred to as Traumatic Combat Reactions (TCR). Essentially, these are behavioural reactions by a soldier under conditions of combat, which are interpreted by those around him as a sign that the soldier, although expected to be a combatant, has ceased to function as such.

Persons who manifest TCR should be referred to as combat stress casualties for the purposes of treatment and, if necessary, evacuation. The terms psychiatric casualty or psychological casualty are not recommended because of their associations with mental illness and psychopathology and the treatment of individuals as patients. It should be noted, however, that some cases may appropriately be classified as psychiatric casualties further down the casualty evacuation (CASEVAC) chain when severe and persistent symptomatology is evident. This issue of diagnostic labelling is seen as very important. As noted above, diagnoses affect an individual's view of the nature of a disorder and its amenability to treatment, and may, as Hibler (1984) notes, damage a casualty's prognosis. Some diagnoses and labels can decrease an individual's perceived control and may intensify their symptomatology (Danish and Smyer, 1981). Even reactions of psychotic proportions may respond favourably if treated immediately and firmly without a diagnosis (Noy, 1980).

Incidence of Traumatic Combat Reactions (TCR)

Direct comparison of statistics on TCR is difficult because of the widely differing definitions and terms used by different armies at different times. Relating these statistics to the definitions suggested in this paper is also problematic because the categories used in published studies do not coincide with them. In this discussion, therefore, the terms used will be those employed in the studies discussed. Even though precision is not possible, the statistics do give a clear indication of the size of the problem, whatever categories are used.

The major lessons learnt from major wars in the twentieth century are that combat stress casualties can constitute a major loss of manpower, that the occurrence of casualties can be expected in groups of well-adjusted, seasoned troops and is not merely a consequence of failing to screen out 'weak' or 'psychologically disturbed' individuals, that the rate of combat stress casualties is highly dependent on factors at least partially under the control of commanders, and that the rate of success in returning initial casualties to their units for continued combat duty is highly dependent on the manner in which they are treated.

Experience during World War II illustrated how serious a problem combat stress casualties could be in sustained periods of combat. During January 1943 and December 1945, over 400,000 neuropsychiatric patients were admitted to US Army hospitals overseas, while a further 127,660 were evacuated to the United States (Anderson, 1966). According to Tiffany and Allerton (1967), a point was reached in early 1943 at which psychiatric casualties were occurring at a faster rate than recruits were entering the service.

American experience in the North African campaign was very negative. Soldiers involved had not been prepared adequately for desert warfare characterised by mobility and intense firepower. A further complication was the fact that the principles of combat psychiatry developed in World War I were not applied initially. As a result early in the campaign 30% of all casualties were psychiatric and only 10% of those ever returned to combat (Mareth and Brooker, 1985). In Europe, too, the psychiatric casualty rate was very high at some periods. The First US Army suffered a neuropsychiatric casualty rate of 101 per 1000 troops per year.

In Korea the Americans again failed initially to remember the lessons of the past, but quickly changed their procedures with very positive results. Initially under the direction of Glass (1954) and then under Peterson (1955) an increasing percentage of men diagnosed as having combat exhaustion were returned to duty.

Vietnam provided a different experience, both because of the different nature of the combat there, and because the principles of combat psychiatry were applied from the beginning of the conflict. Early reports on Vietnam were very positive. Cases of combat fatigue accounted for less than 6% of all psychiatric hospitalisations, with most of these men being returned to duty (Bloch, 1969). Overall, only 6% of all medical evacuations in the 1960s from Vietnam were for psychiatric reasons, while in World War II the figure was 23% (Bourne, 1970). Tiffany (1967) reported the 1965-1966 neuropsychiatric casualty rate as 12 per 1000 and Alterton (1969) reported that in 1967-1968, over a 12 month period, divisions evacuated only four neuropsychiatric patients a month (a division having some 16,000-17,000 men).

The interpretation of these figures varies widely. Bourne (1969) attributed the success to successful preventive measures and the sophisticated approach to combat psychiatry evident amongst both general and specialist medical officers. Glass (1969) and Colbach and Parrish (1970) considered that the nature of the combat in Vietnam was the major factor in reducing psychiatric casualties. Features seen as relevant included the intermittent combat experiences, US air superiority and general protection against bombardment, comfortable base camps, and the one-year rotation policy. In addition, Jones (1967), Renner (1973), and others have noted that the nature of psychiatric cases seen in Vietnam seemed to differ from those in previous wars. Diagnoses of 'combat fatigue' were seldom made except after the relatively rare set-piece battles (Motis, 1968). This low rate of diagnosis may reflect more on the physicians' reluctance to use this term, which many of them viewed as unscientific and productive of guilt, than the absence of symptoms which previously would have led to this diagnosis. Jones and Johnson (1975) reported that, nevertheless, combat soldiers did report with somatic complaints for which no organic basis could be found. Renner (1973) considered that many psychiatric problems never reached psychiatrists. In his opinion, a significant number of problems were dealt with by medical corpsmen or general medical officers at the front, were returned to duty rapidly, and were never recorded as psychiatric cases. In addition there was a substantial rise in other problems, especially drug abuse and disciplinary problems, which were not always noted as psychiatric problems but whose causes were posited to be the stress of combat.

Even so, the psychiatric admission rates in 1970 (25.1 per thousand per year) were nearly double those of 1968, despite the fact that 60 per cent fewer casualties wounded in action were recorded (Neel, 1973). Jones and Johnson (1975) reported that the low rate of out-of-country psychiatric evacuation (less than 5% of medical evacuations) prior to the first quarter of 1971 suddenly increased tenfold, and the outpatient psychiatric treatment rate doubled.

Another country which has had reason to examine seriously the incidence and treatment of TCR is Israel. Prior to

the Yom Kippur War in October 1973 the rate of TCR in Israeli forces had been of no serious concern. Rates in the War of Independence (1948-1949), the Sinai Campaign (1956), the Six-Day War (1967), and the War of Attrition (1969-1970) were considered to be quite managable. During the 1973 Arab-Israeli War (Yom Kippur War), however, the Israeli Defence Force (IDF) for the first time experienced a relatively high rate of battlefield psychiatric casualties. Figures published immediately after the war indicated the ratio of psychiatric cases to wounded in action to be 14:100 or 12.5% of all non-fatal casualties. However, revised calculations which included those formally diagnosed but considered to have been affected, and reactions in the wounded, inflated the ratio to 30:100 or 23% or all non-fatal casualties (Belenky, 1986). IDF psychiatric casualties showed two peaks - first, an early peak in reaction to the shock of the initial Arab assault and second, when the Israelis counter-attacked across the Suez Canal in reaction to intense indirect fire from the Egyptians (Belenky, 1987). It is of interest to note that because the fighting was not prolonged (in the sense of lasting over a period of months of moderate combat, as in World War II) it was not possible to conceptualise the casualties as cases of battle fatigue. Rather, they were better seen as battle shock cases - emotional responses to the stress of battle which developed after hours or days of intense combat.

Belenky (1986) categorised the IDF casualties as falling into three groups. The first, or immediate, stage lasted hours to days and was characterised by anxiety, depression and fear. Most cases were resolved at this point. Those soldiers who did not recover relatively quickly passed into the second, or acute stage, during which neurotic symptoms consistent with the soldier's pre-war personality emerged. This stage lasted days to weeks, but recovery was still likely. However, if treatment was not successful at this point a third, or chronic, stage was entered. This was of long duration, was characterised by personality impoverishment and chronic psychiatrict disabilty, and the prognosis for recovery was poor.

The 1973 war also revealed cases of delayed reactions. Some soldiers who had done well during intense combat broke down upon receiving their first telephone call from home or returning home on their first leave (Belenky, 1986).

In 1982 Israel was again engaged in hostilities, this time of a quite different nature when the IDF invaded Lebanon. Although the principles of treatment had been re-assessed and applied in the Lebanon invasion and the psychiatric to wounded casualty ratio was reduced (from 30:100 in 1973 to 23:100 in 1982), the number of psychiatric casualties was still substantial. During June-December 1982, the IDF sustained 600 psychiatric casualties (Shipler, 1983), 2600 wounded and 465 killed in action.

It is clear from a range of experiences this century that armies can anticipate a significant incidence of TCR to occur in combat troops. This has major implications for the

ability of the medical evacuation system, treatment facilities, the soldiers themselves and, most important from an organisational viewpoint, the percentage of a combat force which can be expected to remain combat effective. In situations of short, intense warfare where the short duration implies difficulty in replacing non-effective troops in a timely manner, and in more prolonged combat but in situations in which it is logistically difficult to replace troops, this latter consideration could be very important indeed. There is a clear need to appreciate the potential size of the problem (anticipating that around one quarter of all casualties could be combat stress casualties) and to possess the doctrine and the system which allows its minimisation and the efficient and effective handling of the casualties which do occur with a view to returning them to active duty as quickly as possible and reducing the probability of long-term harm to the individuals. Accepting that a certain level of combat stress casualties is inevitable, how should they be treated to maximise the probability of return to duty and to minimise long-term harm to the soldiers?

Priniciples of Treatment

It is now widely accepted, based on experience in all the wars discussed above, that there are four basic priniciples which should guide any effective system for handling combat stress casualties. These are:

a. immediacy,

b. proximity,

c. expectancy, and

d. simplicity.

Some experts consider there is an additional principle, namely:

e. centrality.

The first principle, immediacy, refers to the necessity of commencing treatment as early as possible. This is clearly closely related to the principle of proximity, which demands that the treatment take place in a safe place as close to the battle as possible. The principle of proximity evolved from British experience in France during World War I, which indicated that the evacuation of stress casualties to hospitals back in England resulted in an exacerbation and prolongation of symptoms which militated against speedy, or even eventual, recovery. Particular experiences in World War II also illustrated the importance of this principle. For example, because of tactical considerations during the taking of Okinawa by the US Marines 6th Divison, combat stress casualties (which accounted for 48.4% of total casualties) were evacuated far from the front. Very few

were able to be returned to duty because of the severity and persistence of their symptoms (Mareth and Brooker, 1985).

Similarly, immediate treatment tends to prevent a worsening of symptomatology. If simple treatment can be given as soon as possible after symptom onset and in or close to the soldier's unit, this tends to catch the patient while the reaction is still in this initially reversible stage and while he is still in conflict between the interest of his group and his self-preservative instinct. Appropriate handling at this level tends to preserve the group identification and submerge the self-preservative feelings which promote the symptoms. The patient is quite suggestible at this level and tends to decide in favour of the group (Jones and Johnson, 1975, p. 58).

A similar rationale for the importance of applying the principles of proximity and immediacy is given by Glass (1954). He argues that soldiers face two conflicting desires. First, is the desire to maintain ties of group identification, which in turn leads to a tendency to attempt to rejoin the combat unit. Second, on the other hand, is the desire, driven by fear for self, to seek withdrawal from the painful battle situation. Simple, quick treatment in the knowledge that the unit is nearby stimulates and encourages group loyalty. This loyalty is harder to maintain the further the distance from the unit. If a soldier is evacuated from the combat zone these ties become less salient, self-preservation becomes the dominant motivation, and dependency on the symptoms as a way of avoiding further exposure to danger may increase.

It should be noted that applying these two principles can in practice be difficult. As Ingraham and Manning (1980) have noted, immediacy of treatment presumes reaching casualties and, if necessary, removing them from the immediate combat situation. In a fluid, high intensity combat environment this may be an extremely complicated task. When units move frequently over a short period of time, treating soldiers close to their units may also be difficult to arrange. Ingraham and Manning further point out that the proximity principle is complicated by the fact that nearness to battle may be a subjective and not a physical judgement. They report that during the Yom Kippur War the Israelis observed that "100 kilometers behind the front was still psychologically 'close to the fighting' in Sinai, but simply being brought down from the Golan Heights was psychologically equivalent to evacuation to Tel Aviv" (Ingraham and Manning, 1980, p. 26).

The third principle which needs to be observed is that of <u>expectancy</u>, ie treatment must be carried out in an atmosphere of expectation that the casualty will return quickly to active duty. This is an expectancy which must be held by the casualty, by his unit members and commanders, and by treatment personnel. It is also an expectancy which serves both individual and organisational needs. In the latter case, the army obviously benefits by having trained members of units quickly reintegrated into the fighting force, thus obviating the need to bring up

replacements and form new units. The individual also benefits because there is a strong association between failure to return to duty and subsequent, sometimes permanent, psychological disability.

Building up the appropriate expectancy is a task both for pre-combat training and for the combat treatment situation. The training of all soldiers should include instruction on the normal reactions to combat and should reinforce the notion that combat stress reactions are reactions to intense stress which will pass with appropriate treatment, allowing return to duty within a short time of onset of symptoms. The casualty must expect to return to his unit and his unit members must expect to have him back and expect him to perform his duties normally. There must be no suggestion that stress casualties will be removed from combat. A possible danger here is that soldiers may exibit more extreme symptoms, consciously or unconsciously, in order to force a change of view as to their suitability for reintegration and to facilitate their evacuation. Practical experience has shown, however, that this is not a problem which occurs with such a frequency as to warrant concern.

The principle of expectancy is related to that of proximity. If treatment is administered near the Combat Zone it is easier to engender an expectation that the casualty will rejoin the battle. This is one of the reaons why some commentators have recommended that combat stress casualties should not be evacuated by air - which is likely to be to a location physically or psychologically remote from the battlefield and thus make it difficult or impossible to reintegrate a soldier with his own unit - but rather be evacuated only by ground transportation. Even then, the emphasis should be on getting treatment personnel as close to the scene of combat as possible, rather than on getting casualties as far away as possible. The importance of this principle is underlined by a 'natural experiment' which occurred during the Yom Kippur War (Ingraham and Manning, 1980). After the beginning of the war, orders mandated that all casualties (including combat stress casualties) should be flown back to civilian hospitals in Israel. As a result, many soldiers who had recovered substantially in the Sinai and were nearly ready to rejoin their units, broke down on their way to the rear.

An important element in creating the appropriate expectancy is to ensure that at all levels of the evacuation system combat stress casualties are treated as soldiers, not as patients. This implies such things as wearing military uniform, being subject to normal military discipline, and participating in an active program. All measures are to be taken "to avoid a hospital atmosphere, in order to minimize the idea of illness and the temptation of secondary gain which could reinforce the patient's symptoms" (Jones and Johnson, 1975, p. 58).

The fourth principle is that of simplicity, which refers to the provision of basic services such as an opportunity for periods of rest, a change of clothes, a wash, food, and an

opportunity in an individual or group setting to verbalise the experiences and fears of the combat and to ventilate feelings. The purpose is to allow the soldier to come to grips with the powerful, but normal, emotions which are a reaction to extreme stress. Simplicity of treatment is both a practical necessity and a therapeutically desirable feature. Particularly in or near the combat zone it is not possible to employ lengthy or complicated psychological or psychiatric therapies because of the exigencies of the situation. However, experience has shown that brief simple forms of treatment which provide for basic human needs and allow the soldiers to express their emotions and obtain reassurance are all that are necessary to facilitate rapid recovery and the ability to rejoin combat units in the majority of cases. As Jones and Johnson (1975) point out:

> The significant point here is that the psychiatric break in the individual is the result of immediate circumstances and would not have occurred but for these immediate circumstances. The break is reversible early and what is needed are measures to suppress and repress the feelings and symptoms in order that the individual may regain his integrity of function and reverse his failure of adaptation. At this level and at this time, attempts at uncovering and solving life-long problems on the assumption that they have helped to set up the patient for his failure are not only impossible but irrelevant. (p. 59).

A final principle which is often discussed but which in many written treatments of the subject is not always elevated to a level equal to that of the other principles is that of centrality. This refers to the establishment of a screening centre or system through which all those considered in need of evacuation are processed. The primary purpose of central screening is to prevent inappropriate evacuations, thus ensuring that as many casualties as possible are treated as far forward as possible.

Applying the Principles: Return to Duty Rates

The historical record in wars this century has clearly indicated that applying the principles outlined above dramatically increases the likelihood of soldiers suffering from combat stress reactions being able to return to active duty. The lessons were first learnt during World War I. The British evacuated their stress casualties from France to Sanatoria in England. Most of these men deteriorated upon evacuation and few returned to active duty. The French, on the other hand, treated their casualties near the battlefront in a military environment characterised by military routine, discipline and drill. From this system, they returned up to 70% of their stress casualties to duty (Baker, 1975; Hausman and Rioch, 1967).

Learning from these experiences the U.S. Army, following the recommendations of Dr. Thomas Salmon, endeavoured to employ the principles of forward treatment. The results were positive, but complicated by the changed nature of the combat by the time U.S. troops were committed in large numbers. (By this time the character of the war had changed from one of being subjected to intense bombardment whilst static in trenches to a more mobile style of non-trench warfare.)

It is important to stress, too, that Salmon noted the practical difficulties of attempting to implement the principles on a real battlefield (Salmon and Fenton, 1929). First, there was the natural tendency for a fighting army to try to free itself of its casualties by the fastest means - evacuation to the rear. Second, were the practical difficulties of trying to treat casualties near their units when these were changing location frequently. The reality was that the casualties soon were left behind a mobile and advancing army. Third, were the problems caused by not having a proper triage system, with professionals experienced in mental health areas. The importance of scrutinising the flow of combat stress casualties and attempting to control, as far as possible, their evacuation was noted. In the absence of such control:

> ...many hundreds of men suffering from exhaustion, concussion neurosis, fear, and other emotional states found themselves within a few days after leaving their organizations, in hospitals a hundred miles or more away from the front. Very few of these men ever returned to active duty. (Salmon and Fenton, 1929, p. 317).

It is often argued that these lessons had been forgotten by the Americans by the time they entered World War II and that this is why they initially failed to apply the principles of treatment, with extremely negative results (Glass, 1954; Hales and Jones, 1983). An alternative explanation is that "American psychiatry remembered the success of World Was I all too well - but credited the wrong variables" (Ingraham and Manning, 1980, p.34). In particular, there was a misplaced confidence in the ability of psychiatrists to screen out those thought to be at risk of breaking down. As a consequence, rather than forgetting the lessons of World War I, the U.S. Army simply believed them to be irrelevant because significant stress casualty rates would not occur. Experience proved otherwise and showed the inability of psychiatry to identify those prone to suffer stress symptoms and other psychological problems.

Whatever the explanation, the Americans quickly saw the trends and began to apply the standard principles. Thus, early in the North African campaign, for example, combat stress casualties were evacuated to base hospitals up to 500 miles behind the lines. Less than 10% of these men returned to duty (Menniger, 1948). In contrast of those treated intensively within 20 miles of the front, 60% of combat stress casualties returned to duty (Ludwig and Ranson, 1947). Wiltse (1965)

reported that only 3% of psychiatric casualties evacuated to distant hospitals early in the Tunisia Campaign returned to combat duty, whereas following the establishment of forward treatment facilities and policies, the figure rose to 50 to 70%. Similar results were reported for other theatres of war (Kaufman and Beaton, 1973; Thompson, Talkington and Ludwig, 1973).

During the Korean War, division psychiatry became operational within six to eight weeks after the onset of hostilities in June 1950, with three levels of psychiatric treatment being in place by October that year. Further gains were achieved by the movement forward of the treatment site for mild combat stress casualties to the battalion and regimental level (Glass, 1954). Peterson and Chambers (1952) reported that applying the standard principles resulted in return to duty rates of between 50 to 90% in the division. A later study (Peterson, 1955) examined all neuropsychiatric cases in the first half of 1953 and found that only one case was evacuated to the United States for 31 returned to duty. Of those who were actually hospitalised the ratio was one evacuated to seven returned to duty.

The applicability of the basic principles was again demonstrated in Vietnam, initially contributing to the lowest incidence of combat psychiatric casualties in U.S. military history (Jones and Johnson, 1975). As the war progressed, especially after 1968, psychiatric casualty rates rose substantially, mainly reflecting the growing problem of drug abuse in U.S. military forces and the fact that drug dependent soldiers detected by urine screening were evacuated as psychiatric casualties. The rate fell again when drug rehabilitation facilities were established in Vietnam and drug abusers began to be accounted for through different channels (Jones and Johnson, 1975).

For standard combat stress casualties, however, the system in Vietnam worked well. Each division was allocated one psychiatrist, one social work officer and eight medical corpsmen trained in psychiatric social work (Bloch, 1969). The corpsmen usually worked in forward base camps near the fighting, with the psychiatrist and social work officer travelling from their base at division headquarters throughout the division medical facilities. Solders with symptoms of TCR were first dealt with by the corpsmen. Treatment was brief and simple:

> He usually takes him (the casualty) to a quiet place, urges him to review the traumatic events, reassures him, lets him sleep overnight after a hot meal when possible, recommends medications to the general medical physicians there when appropriate, and then returns the man to duty the next morning. (Bloch, 1969, p. 290).

If a soldier could not be returned to duty within 24 hours he was either held for examination by a psychiatrist on a regular visit or evacuated to the divisional base camp where the divisional psychiatrist evaluated the condition and either

attempted brief therapy or evacuated the soldier rearwards to one of two specialist psychiatric teams. These teams, designated KO teams consisted of three psychiatrists, one neurologist, one nurse, one psychologist, two social work officers, and approximately a dozen enlisted nursing, social work, and psychology specialists (Jones and Johnson, 1975). Each KO team operated a psychiatric ward as well as providing outpatient and consultation services. KO team policy was to evacuate casualties out of country for more definitive treatment if they could not be returned to duty within two to four weeks. A study of one of these teams reported some 76% of treated cases were returned to duty (this figure includes casualties from both combat and combat support units) (Bloch, 1969).

The final evidence to be considered for the importance of applying the basic principles to the treatment of TCR comes from the Israeli experience. The IDF has approached the problems of TCR head-on, paying a good deal of attention both to prevention and treatment:

> As a consequence of the experiences of the 1973 war, the IDF set out to solve the dual problems of preventing and treating psychiatric casualties. The top leadership of the IDF recognised the importance of battle stress as a factor in unit combat capability and strongly supported the development of a program for dealing with the problem....the IDF has made a major contribution to the world's military forms by being the first major army in the West to systematically construct and operate an on-ground, unit-based system for preventing and treating battle trauma. (Gabriel, 1982, pp. 37-38).

The results of this orientation have been impressive. In the 1973 war all psychiatric casualties were evacuated to the rear, only a few were returned to their units, and many became chronically disabled. Following the adoption of the forward treatment doctrine the situation was quite different. In 1982 the IDF deployed mental health teams with the medical battalions supporting division-sized units and operating from two to five kilometres from the front. Each team had five members, comprised of a psychiatrist, one or two psychologists, and two or three social workers. Some of the teams reported a 95% rate of return to unit for TCR cases (Enoch, et al., 1983). Overall, the results for those treated in accordance with the standard principles versus those who were not, make an interesting comparison. Of soldiers diagnosed as psychiatric casualties and treated forward at the Advance Medical Battalion, 75% were sent back to their units within 72 hours. Administrative reasons prevented some of these soldiers actually reaching their units, so the effective return rate was 60%. The return to duty rate for those who were treated in Israel proper was only 40% (Noy, Solomon and Benbenishti, 1983). It is interesting to note, however, that one particular rear treatment unit was as successful as the average forward treatment team at returning soldiers to duty (Solomon and Noy, 1983). This may indicate

that, other things being equal, proximity to the front may not be as important a factor in symptom resolution as is the treatment team's expectancy that the soldier will return to duty.

The importance of elements of the principles other than proximity was also shown by the Israeli experience with combat stress casualties whose condition necessitated further institutional care after two to three weeks of combined first and second echelon psychiatric care. Margalit, et al. (1983) reported on the 60 of the 600 soldiers evacuated from Lebanon as psychiatric casualties who required this care. Such cases were sent to the Combat Fitness Retraining Unit (CFRU), a facility located on the grounds of a sports institute in central Israel and staffed by psychiatrists, psychologists, social workers and sports coaches. Treatment consisted of a combination of individual and group psychotherapy, individual and group sports, and combat-oriented military training. The average stay was 26 days. The 60 patients came about equally from regular and reserve units, with most serving in combat units. Of the regular soldiers 43% were returned to their original units, while 38% of the reservists were returned. Some of the soldiers went back to combat in Lebanon and none of the patients who completed treatment at the CFRU needed further institutional treatment.

One question frequently asked is whether soldiers returned to combat units after suffering a TCR perform as well as other unit members. Another is whether such soldiers are more likely to suffer further TCRs. Evidence from a number of conflicts indicates that combat stress casualties generally perform as well as anyone else after their return to unit. Glass (1954) reports that "relatively few instances of recurrent disability were noted" (p. 730) amongst psychiatric casualties in Korea. Peterson and Chambers (1952) state the percentage of repeaters to be under 10%. In an extensive study of neuropsychiatric patients in the Pacific during World War II, Berlien (1954) found tht 80% of men returned to duty from a particular neuropsychiatric treatment hospital remained on duty in the theatre.

Probably the most extensive data relating to performance of returned combat stress casualties has been collected by the Israelis. Solomon, Oppenheimer and Noy (1983) studied the recurrence of TCR in soldiers who had been treated for this in the 1973 war. In June 1982, the IDF still had 600 of these men on record, of which 40% were combat-ready by profile. (The IDF use psychological measures extensively to assess individual and unit readiness for combat). A control group of 1973 veterans showed that 75% were combat-ready by profile. In other words, those sufferring TCR were less likely to be combat-ready some years afterwards, implying a degree of vulnerability to life-stress or chronic disability (Belenky, 1986, p. 168).

The performance of those who actually fought, however, was good. Of the former psychiatric casualties who were combat-ready by profile (about 240), 200 fought in Lebanon. Their

psychiatric recurrence rate was 1%. The recurrence rate for the control group was 0.5%, while the overall reservist recurrence rate was 0.67%. As Belenky (1986) concludes:

> Thus, there was no discernible difference in psychiatric breakdown rates in Lebanon between those soldiers who had suffered previous breakdowns during the 1973 war and those who had served in the 1973 war but not broken down. The IDF concluded that if a soldier was ready for combat duty by profile, a previous history of battle-shock would not place him at increased risk for future combat-related psychiatric breakdown. (p. 168).

In summary, then, a wide range of experience has shown conclusively that applying the basic principles of immediacy, proximity, expectancy, simplicity, and centrality is highly correlated with the resolution of TCR symptoms and the likelihood of a treated soldier being able to return to combat duty. This is to the advantage of both the army (which does not lose valuable trained men and reduces the need for difficult-to-implement replacement policies) and the individual (since failure to resolve symptoms quickly and return to duty significantly increases the probability of chronic disability). Experience has also shown that those who return to duty after resolution of TCR symptoms are not at significantly greater risk of subsequent combat stress problems than their fellows. They can be integrated back into their units and perform effectively.

Staffing TCR Treatment Units

Traditionally, treatment of combat stress casualties has been almost exclusively left to medical officers, and particularly to psychiatrists. However, experience in Vietnam and in recent Middle East conflicts, as well as developments in current British and U.S. Army thinking, favour a sharing of responsibility among a range of professional groups (medical doctors, psychologists, social workers and related occupations) as well as a lowering of the level of professional qualification needed for groups to be included in the treatment team. This is particularly important in view of the emphasis on early, simple treatment as far forward as possible, which necessitates the employment of trained, but professionally unqualified, enlisted personnel in many first echelon positions.

The comprehensive team approach is well illustratd by the U.S. Air Force's Battlefield Stress Management Team (BSMT) structure (Hibler, 1984). These teams comprise a clinical psychologist, clinical social worker, psychiatrist, mental health technicians, and social actions personnel. The senior behavioural science officer is designated as the team chief, rather than the phychiatrist being so designated, on the assumption that during wartime the latter would often be required to function effectively as a physician and would act as a consultant to the team.

The teams have been assigned a role much wider than that of treatment. It would appear that some of the BSMT concept is modelled on the successful experience of the IDF's use of organisational psychologists (Greenbaum, Rogovsky and Shalit, 1977). The BSMT is employed, first, as a line consultant attempting to enhance unit leadership and existing management techniques. Emphasis is placed on evaluation of group and environmental factors that determine the incidence and types of combat ineffectiveness. Included in the evaluation are indicies of "(a) intensity of combat; (b) duration of combat; (c) type of combat action; (d) pace of combat action; (e) wounded in action and killed in action rates; (f) type of unit; (g) unit cohesion; (h) unit leadership; (i) replacement process; (j) experience in combat; (k) expectations; (l) competing demands on loyalty; (m) command preparation for management; and (n) medical preparation for management" (Hibler, 1984, p. 5). The collection and analysis of such information can be utilised to monitor the development of situations conducive to the emergence of TCR and where possible to suggest management or other changes which may minimise its impact.

The second role of the BSMT is the screening and psychological triage of casualties. Essentially, this involves identifying normal somatic and psychological reactions to battle field stresses (combat stress reaction) and screening out those who have abnormal reactions (TCR).

The U.S. Air Force operates a three-echelon medical care system. Within this system, the first echelon of care is provided by `buddy care'. If this is insufficient, casualties are referred through a casualty collection point to the second echelon where a BSMT operates in close physical proximity to the minimal care treatment team (medical). The BSMT conducts brief screening and either arranges for individuals to eat and sleep for several hours before returning to duty, and supplies encouragement and basic psychological support, or refers them on to the third echelon for further treatment. At the third echelon, a second BSMT operates a treatment regime running from one to four days and consisting of rest, relief group sessions, minimal work and return to duty. Those casualties who continue to display pathology are evacuated to more distant treatment facilities or to facilities in the United States. It should be noted that an important part of `working up' the BSMT is its frequent deployment with air transportable hospitals and clinics, and second echelon treatment teams, which provides "a realistic awareness of the working environment at several locations and under all weather conditions. This 'hands on' experience also allows the development of simple and practical triage techniques" (Hibler, 1984, p. 5).

Both U.S. and Israeli experience has shown the importance of familiarisation of treatment personnel with conditions in or near the combat zone. Gabriel (1982) attributes the successful application of psychology to combat unit commanders to be due, at least partially, to the fact that psychologists have all served at least two years in the ranks (as

is required of all officers) and are thus accepted as fellow soldiers by troops and officers. Obviously, this experience also makes psychologists aware of the conditions and problems which are encountered by soldiers in the combat zone. In the IDF, this understanding and acceptance is further enhanced by having psychologists institutionalised within major fighting units. Each division of the IDF ground forces has a team of six psychologists with a small clerical support staff. Each brigade within the division has two staff psychologists assigned to it from the division section. The brigade psychologists are responsible to their unit commanders and to the IDF Department of Behavioural Science in Tel Aviv for preventing and treating combat stress casualties (Gabriel, 1982).

Other studies have also demonstrated the importance of having treatment staff (either psychiatrists or psychologists) closely identify with front-line units. Both preassignment professional background and nature of assignment in the combat theatre affect clinical judgement in the field (Camp and Carney, 1987). Those who serve in a `combat' treatment unit tend to have more commitment to the military mission, thus orienting their clinical perspective more in line with military goals of force conservation. Accordingly, such personnel tend to perceive the therapeutic goal as being to assist the soldier to overcome symptoms of failure to adapt to the stresses of combat and to remain committed to the welfare of his combat unit and to his mission. On the other hand, treatment personnel assigned to `combat-support' treatment units tend towards "clinical decisions believed to protect the individual soldier from further exposure to a dangerous environment" (Camp and Carney, 1987, p.131). Given such findings, it would appear useful to attempt to give treatment personnel a reasonable period of service in a military environment prior to `combat' treatment duties during which they would gain an understanding of the needs of the organisation and would be exposed, through exercises and specific training, to the conditions under which they will be expected to function. (This argument assumes a period of mobilisation during which civilian professionals are being inducted into the Army. If serving psychologists/psychiatrists are involved they should be aware of the military environment, but still require specific training, experience in exercises, and inculcation of appropriate expectancies.)

The above considerations may also constitute one of the arguments for assigning psychologists a more prominent role in the management of combat stress casualties in the Australian Army. Ingraham and Manning (1980) point out that because of their training and background, a significant proportion of psychiatrists see their duty as protecting soldiers from further injury and trauma. This leads to a tendency to see evacuation rearwards as being the humane, responsible course of action. Conventional, time-extensive treatment techniques reinforce the impulse to evacuate quickly. Similarly, these authors record that the Israelis "found that psychiatrists with mostly civilian experience have special difficulty adjusting to brief treatment, focused on the here and now, with minimal recourse to drugs.

Many of these physicians consider it necessary to probe deeply into the psycho-histories of the patients by conventional means. Such psychiatrists will not be of much use in the next war" (Ingraham and Manning, 1980, p. 27).

It would seem that the Australian Army Psychology Corps (AAPSYCH) provides an ideal base for the development of a combat stress casualty treatment system. It has officers and NCOs capable of functioning as members of treatment teams already possessing a varied background of service in the military environment. Because of the trend in recent years towards the use of brief psychotherapies and the development of behaviour modification techniques, with their emphasis on the identification of overt problem behaviours and the manipulation of environmental factors (which leads, in general, to short-term interventions), clinically-trained psychologists possess the attitudes and habits which more closely accord with the needs of a system of treatment based on the principles of immediacy, proximity, expectancy, and simplicity. This is in no way to denigrate the abilities of psychiatrists, but merely to point out that there exists within the Army a pool of personnel whose training and experience should lead them to a faster adaptation to the needs of the organisation in dealing with combat stress casualties. In order to make the best of this capability, however, policy decisions need to be made to determine precise doctrine in this area, re-assess the adequacy of current CASEVAC and treatment systems to cope with the expected numbers of combat stress casualties, and train treatment teams in specific techniques and procedures. The argument made here is that psycholgists make ideal candidates for forming the core of such a system. Psychiatrists may, perhaps, be seen as being most appropriately involved as consultants or as providing the longer term treatment for those casualties who do not respond to early, brief interventions.

Another argument for placing more responsibility on psychologists is that since they already function in numbers in the military environment they can more easily be integrated into existing structures. The Israelis have found that it is important to attach field psychologists to units before a crisis so that they are known, their value is appreciated and they can become identified with the unit (Babad and Salomon, 1978). Because psychologists can serve many useful functions in support of Army operations (Wardlaw, 1981) there already exist sound arguments for reorienting their duties to more directly service units. The additional impetus of providing the core of an adequate combat stress casualty treatment system merely strengthens these arguments. It does, of course, have implications for AAPSYCH recruitment, training and career policies (Wardlaw, 1981). Along similar lines, Savage (1980) has expressed the opinion that all Army psychologists should have a "minimum of skills for investigation and treatment of behavioural or psychological disorders arising from 'National Emergency or State of War' conditions" (p. 4) and that a specialist clinical psychology unit should exist in each major Army General Hospital. As a first step, Savage proposed the raising of such a unit in

a military district to "pioneer the techniques and inter-disciplinary co-operation necessary to support such a unit" (p. 11).

Prevention and Training Implications

Whilst it is clearly desirable to be able to treat combat stress casualties when they occur, it is obviously even more desirable to minimises their frequency of occurrence or severity. Consistent with the principle of expectancy central to treatment of stress casualties is an emphasis on training soldiers and supervisors to recognise that unusual levels of psychological and physiological arousal are normal reactions to the extreme stress of combat. It should be a constant theme in training and preparation for battle that some reactions such as shaking, perspiration, fear and panic, sensitivity to noise, digestive and urinary system reactions, etc. occur in most personnel in battle and that they should be recognised by the individual and his companions as legitimate and not indicative of breakdown, failure, or cowardice. These symptoms are more easily tolerated if they are understood and expected. It should be emphasized in training that "these 'normal' reactions are separated from 'abnormal' reactions by a continuum based on the severity, number, and duration of these symptoms and their effect on the individual's ability to perform his duty" (Hibler, 1984, p.6). This attitude is particularly evident in the IDF with its recognition that a certain level of stress casualties are inevitable, that the casualties are the result of objective battle conditions rather than of cowardice or personality traits, and that there should be no stigma attached to combat stress casualties. As Gabriel (1982) observes:

> There is none of the official silence in the IDF - a condition which seems to characterize other armies - that refuses to recognize the inevitablity of psychiatric casualties and which implies that to establish mechanisms to deal with them in proximity to the battlefield will, paradoxically, increase the rate at which they will occur. This notion is rejected by the IDF as naive and counterproductive to effective battle units. (p.39).

There is obviously a need, then, to educate soldiers about the reactions they can expect to experience on the battlefield so that they are in some degree prepared for them and so may cope better. Such education should also be aimed at teaching soldiers to recognise the difference between `normal' and `abnormal' reactions in unit comrades so that the former are reacted to with reassurance and support and the latter are likewise treated but attempts also made to seek help for the individuals. It is important that junior leaders, in particular, are trained to make these distinctions, as it will usually be their responsibility to refer casualties to a collection point for further assessment. This has been recognised by the British

Army which has recently introduced increased training designed to recognise combat stress under operational conditions. New training protocols designed to teach all officers and NCOs down to lance corporal level and all medical personnel, to be able to recognise and treat the early stages of combat stress reactions have been implemented and include the annual testing of these skills (Manners, 1988). Army exercises will progressively include simulation of combat stress problems and their solution.

The extent of the current deficit in knowledge and skills in this area is illustrated by a U.S. Army survey carried out recently by Schneider and Luscomb (1984). In order to document the general level of competence in recognising and treating stress casualties, 261 enlisted medics, enlisted non-medics, and officers were administered a questionnaire which asked about beliefs concerning recognition and treatment of stress casualties, and assessed attitudes toward such casualties. The results showed that only a small proportion of respondents had undergone any specific training on combat stress reactions or had seen simulations including them. Not suprisingly, as a result there was a very low rate of recognition of symptoms or knowledge about appropriate treatment methods. Perhaps more disturbing was the finding that medics did not seem to score significantly better than non-medics. As the authors conclude:

> It is clear that there has been little effective dissemination of information to those who could most benefit: (1) the soldier who will usually be the first person available to recognize Battle Stress Reaction (BSR) and provide buddy aid; (2) the medic, who provides first-line combat medical support; and (3) leaders who must conserve manpower. (Schneider and Luscomb, 1984, p. 67).

Schneider and Luscomb also note the importance of accurate simulation of the behaviour of combat stress casualties in exercises. They point to occurrences in exercises in the 'Reforger' series in Europe in which stress casualties acted out the role by attacking medics, tying them up, and running screaming from the ambulance into nearby woods. In their view, this sort of portrayal probably contributed to inaccurate descriptions of such casualties and unrealistic perceptions of their likely behaviour. Perceptions about the likelihood of return to duty were particularly in need of changing. The study emphasized the importance of including combat soldiers in any training program emphasizing recognition and training since they will be the first to have contact with an individual in the initial stages of TCR. Soldiers can be taught minimal recognition and treatment skills which can be built into normal unit and buddy function training and indoctrination. Much of the necessity to seek higher level or professional assistance could be avoided by attempts by company-level personnel to mitigate or control dysfuntional stress.

In summary:

> Any training program should emphasize relatively simple principles. It should help soldiers recognize that there might be a need for special short-term considerations for their battle buddy. Such considerations could include giving him temporary rest, getting him a hot meal, and the importance of having his battle buddy sit down and talk with him about his feelings.... Education should also be directed at teaching individual soldiers what to expect in terms of `normal' combat reactions. Normal somatic and psychological symptoms of combat stress have been well documented and described. This should help decrease the surprise and strangeness of a normal combat reaction and help the soldier decide when he can appropriately provide assistance or when other help is needed. (Schneider and Luscomb, 1984, p. 68).

Training soldiers to recognise and even cope with fear, of course, is not enough. As Sproule (1981) points out, in combat there are times when fear must simply be endured. Soldiers need more than simple fear-reducing techniques - they need something stronger. It is well-recognised that this `something' is a constellation of forces which include faith in one`s leaders, pride in and loyalty to one's unit, confidence in one's buddies, regimental spirit and belief in the cause and the immediate objective for which one is fighting. Citing Israeli studies, Belenky (1987) reported that in the 1973 war, IDF soldiers were less likely to become psychiatric casualties and more likely to perform well and to be decorated for heroism if they came from units with good leadership and good unit cohesion, and if they had stable personal and family lives. Tank crews fighting on the Golan Heights who had trained together were more combat effective and had fewer combat stress casualties than tank crews experiencing the same combat conditions who, although as well trained, had not trained together. Similar results were found in 1982 when it was judged that good personal and unit morale protected IDF soldiers from becoming combat stress casualties (Belenky, 1987). Studies before, during, and after the Lebanon war indicated that there was a positive correlation between personal and unit morale and effective performance in combat, reduced liability to suppression by enemy fire, and reduced likelihood of becoming a combat stress casualty (Belenky, 1987). A study by Meir Steiner and Micha Neumann, reported by Milgram (1978), compared soldiers with post traumatic neurosis to controls who had been engaged in heavy combat during the Yom Kippur War, but were afterwards symptom free. They found that absence of post-traumatic symptomatolgy was highly associated with trust in leadership, identification and familiarity with the fighting unit, and high military self-esteem. Such results, which serve to reinforce similar findings reported in World War II, emphasize the importance which must be given to fostering and monitoring unit cohesion, leadership and confidence of the troops in the organisation and its objectives.

This latter issue of monitoring is another facet which has been particularly developed by the IDF over the last two decades. The IDF Department of Behavioural Sciences conducts regular morale surveys, some periodically (once a year), some at predetermined points along training courses, and others in response to events which presumptively affect a unit's morale. The surveys are administered by trained field psychologists, and the results are immediately fed back to the unit commanders (Gal, 1986). The commanding officer of the unit is central to the process:

> He is the one who invites the survey, he is the first to be reported to about its results, and he is also responsible for carrying out the conclusions and actions to be taken, derived from the findings obtained by he survey. (Gal, 1986, p. 552).

This process is possible in the IDF because of the existence of field psychology units well integrated into the combat unit structure. Psychologists work in teams of two or three (thus providing mutual personal and professional support in stressful situations) attached to a host operational unit, but under command of the Department of Behavioural Sciences. This closeness between psychologists and unit commanders, the familiarity of the psychologists with the 'on-the-ground' situation and the backgrounds of the psychologists themselves all contribute to a degree of trust and of communication which is impressive. As Greenbaum, Rogovsky and Shalit (1977) note:

> The field psychologist is thus a consultant from within the larger organization. He usually identifies with the goals of the client with whom he consults, since he, too, is serving. On the other hand, since he is not under the direct, formal command of the officers with whom he interacts, he can maintain a measure of independence in keeping with its consultant role. (p. 10).

The use of surveys and discussion groups designed to assess such issues as morale, unit cohesion, and confidence in leaders, weapons, or mission has been highly successful in Israel, even under combat conditions (Gabriel, 1982). Such methods not only monitor important dimensions of feeling and behaviour relevant to combat performance, but when accepted (as they are in the IDF) as a routine part of unit functions they can serve as part of the psychological de-briefing process in combat situations, which itself contributes to the minimisation of TCR.

There is much in the Israeli model which is of relevance to the Australian Army. Although there are unique social and institutional factors in the IDF which make the role and acceptance of psychologists in that Army somewhat different from the Australian case, there is nevertheless a good argument for assessing ways of locating psychology units closer to combat units and for including in their functions the organisational

consultancy aspects which have proved so useful in the IDF. In particular, the development of the technical methodology and of the operating system to allow Australian Army psychologists to measure unit cohesion, morale, etc and to feed the results back to commanders would be highly desirable. This should be integrated with changes in training to place fresh emphasis on the importance of these factors to performance and to the minimisation of the occurrence of TCR.

In addition to an increased emphasis on these psychological factors, more emphasis needs to be placed on the application of research data on the effects of physical stressors on the rate of TCR. Data from exercises (Manning, 1979) and actual combat (Moses and Cohen, 1984) underline the importance of such factors as the insistence on taking rest breaks, pacing tasks and other measures designed to overcome some of the well-known, but often ignored, consequences of fatigue and sensory overload. Moses and Cohen (1984), for example, reported that soldiers who did not allow themselves either enough sleep or enough food and water (even though combat conditions allowed it) had an increased likelihood of developing TCR. Wardlaw (1981) has listed some of the research effort which needs to be stimulated in order to ensure that the data already available on combat stress, especially during continuous operations, are translated into operationally useful guidelines. However, a wealth of practical information and experience is already available through the efforts of Sub Group U Behavioural Sciences of the Technical Cooperation Project (TTCP) (see, for example, TTCP, 1974, 1979) and there is an urgent need to incorporate this into training courses at all levels.

Proposals for the Development of a Combat Stress Casualty Treatment System for the Australian Army

The information reviewed in this report points clearly to a growing awareness of the potential problems which can arise from an inability to minimise the occurrence of or successfully handle combat stress casualties. In many modern combat situations, with difficulties of replacing losses fast enough to keep up with the pace and complexity of the conflict, the ability to return stress casualties to duty may well be critical.

Despite widespread understanding of this situation, it is equally clear that little concerted action has been taken in the Australian Army either to significantly upgrade and expand training and preventive measures relevant to combat stress reactions or to establish a dedicated and well-practised system for managing combat stress casualties. The emphasis in current planning and training is on physical trauma evacuation and treatment. Responsibility for combat stress casualty management rests with the Royal Australian Army Medical Corps (RAAMC), but current doctrine makes little direct reference to how that responsibility will be discharged (see, for example, Manual of Land Warfare, Part Two, Medical and Dental Training, Volume 1,

Pamphlet No.1, The Employment of the Health Services). At present, AAPSYCH has no direct role in stress casualty management, except as an advisor at the request of RAAMC personnel. Given the limited psychiatric expertise available in RAAMC, the load placed on RAAMC in maintaining the physical casualty management system, and the expertise which exists in AAPSYCH particularly, for clinical skills, in the Army Reserve component), it would seem that a good argument can be made for giving AAPSYCH more responsibility in this area.

It is proposed that DPSYCH-A should be tasked with preparing, in consultation with DMS-A and DNS-A, a detailed plan for combat stress casualty management which includes recommendations for an Army-wide education process designed to incorporate knowledge about combat stress reactions into all relevant training programmes and exercises, the devising of a comprehensive policy on combat stress casualty management, and the design of a management/treatment system based on special units staffed by AAPSYCH, RAAMC and RAANC personnel.

It is proposed that 1st Psychology Unit serve as the prototype of a new treatment team in order to devise and test new operating procedures and methods. A suitable stress casualty management system has been outlined in an earlier 1st Psychology Unit paper, 'Clinical Psychology in the Area of Operations' (Reference Note 1) and this approach is endorsed for further feasibility study. It should be noted that the functions of this embryo unit are consistent with the development of a peacetime capability for dealing with crisis-induced stress reactions in Army personnel suggested by Wardlaw (1984). The experience gained in such peacetime service-provision would be valuable training for a wartime stress casualty treatment role.

Conclusion

This report has reviewed the evidence on the nature of combat stress reactions and examined some of the factors which contribute to the onset of TCR. It is suggested that some of these factors can be manipulated by education and training, good leadership, increased unit morale and other elements which should contribute to less frequent or less severe symptoms being experienced by combat troops.

It is also recognised that some level of combat stress casualties is inevitable and the paper has outlined the principles of treatment which should be followed.

It was argued that these measures attract insufficient attention in the Australian Army and that it is appropriate for AAPSYCH to take a more active role in this area. A specific suggestion was made that DPSYCH-A should be given the responsiblity of coordinating specific policy on combat stress casualty management and designing and testing a casualty management system.

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Reference Note

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